

ABSTRACT

One embodiment of the invention relates to a low profile electric generator having a short axial length. A cylindrical rotor body defines an interior cavity and is coupled to a driveshaft along the axis of the cylindrical body. A first rotor assembly is coupled to the inner surface of the cylindrical body, the first rotor assembly defining a space to receive a first stator that is independent from the cylindrical body. A second rotor assembly is coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor assembly. A second stator is arranged around the second rotor assembly, independent from the cylindrical body, and radially positioned about the axis of the cylindrical body. By arranging the generator components in such configuration, the axial length of the generator is reduced in comparison to a conventional generator.